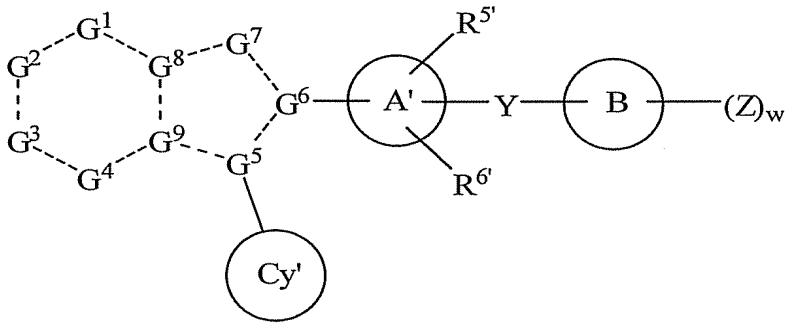
AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

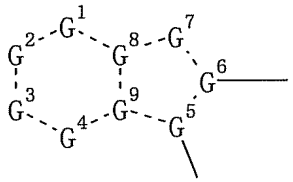
1.-110. (Canceled)

111. (New) A fused ring compound of the following formula

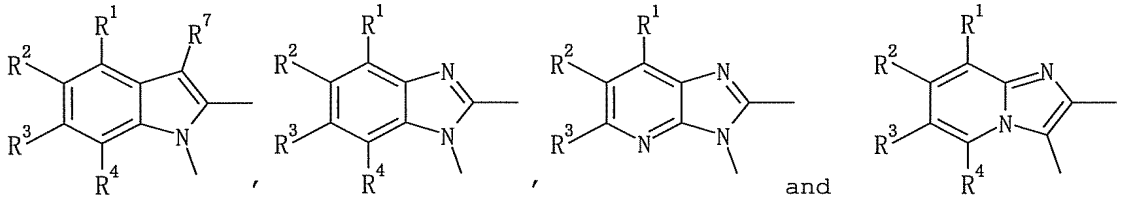


wherein

the moiety



is a fused ring selected from



wherein R^1, R^2, R^3 and R^4 are each independently,

(1) hydrogen atom,

(2) $C_{1\text{-}6}$ alkanoyl,

(3) carboxyl,

(4) cyano,

(5) nitro,

(6) $C_{1\text{-}6}$ alkyl optionally substituted by 1 to 3

substituent(s) selected from the following group A,

group A is selected from the group consisting of halogen atom,

hydroxyl group, carboxyl, amino, C_{1-6} alkoxy,

C_{1-6} alkoxy C_{1-6} alkoxy, C_{1-6} alkoxycarbonyl, and C_{1-6} alkylamino,

(7) $-COOR^{a1}$

wherein R^{a1} is optionally substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the following group B or glucuronic acid residue,

group B is selected from the group consisting of halogen atom, cyano, nitro, C_{1-6} alkyl, halogenated C_{1-6} alkyl, C_{1-6} alkanoyl, $-(CH_2)_r-COOR^{b1}$, $-(CH_2)_r-CONR^{b1}R^{b2}$, $-(CH_2)_r-NR^{b1}R^{b2}$, $-(CH_2)_r-NR^{b1}-COR^{b2}$, $-(CH_2)_r-NHSO_2R^{b1}$, $-(CH_2)_r-OR^{b1}$, $-(CH_2)_r-SR^{b1}$, $-(CH_2)_r-SO_2R^{b1}$ and $-(CH_2)_r-SO_2NR^{b1}R^{b2}$ wherein R^{b1} and R^{b2} are each independently hydrogen atom or C_{1-6} alkyl and r is 0 or an integer of 1 to 6,

(8) $-CONR^{a2}R^{a3}$

wherein R^{a2} and R^{a3} are each independently hydrogen atom, C_{1-6} alkoxy or optionally substituted C_{1-6} alkyl (as defined above),

(9) $-C(=NR^{a4})NH_2$

wherein R^{a4} is hydrogen atom or hydroxyl group,

(10) $-NHR^{a5}$

wherein R^{a5} is hydrogen atom, C_{1-6} alkanoyl or C_{1-6} alkylsulfonyl,

(11) $-OR^{a6}$

wherein R^{a6} is hydrogen atom or optionally substituted C_{1-6} alkyl (as defined above),

(12) $-SO_2R^{a7}$

wherein R^{a7} is hydroxyl group, amino, C_{1-6} alkyl or C_{1-6} alkylamino,

(13) $-P(=O)(OR^{a31})_2$

wherein R^{a31} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above) or C_{6-14} aryl C_{1-6} alkyl

optionally substituted by 1 to 5 substituent(s)
selected from the above group B,

or

(14) heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom, and

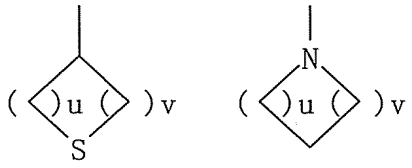
R^7 is hydrogen atom or optionally substitute C_{1-6} alkyl (as defined above),

ring Cy' is

(1) C_{3-8} cycloalkyl optionally substituted by 1 to 5 substituent(s) selected from the following group C,

group C is selected from the group consisting of hydroxyl group, halogen atom, C_{1-6} alkyl, and C_{1-6} alkoxy, or

(2)



wherein u and v are each independently an integer of 1 to 3,

ring A' is a group selected from a group consisting of
phenyl, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl,
cyclohexyl, cyclohexenyl, furyl, and thienyl,

$R^{5'}$ and $R^{6'}$ are each independently

(1) hydrogen atom,

(2) halogen atom,

(3) optionally substituted C_{1-6} alkyl (as defined above) or

(4) hydroxyl group

ring B is

(1) C_{6-14} aryl,

(2) C_{3-8} cycloalkyl or

(3) heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom,

each Z is independently

(1) a group selected from the following group D,

(2) C_{6-14} aryl optionally substituted by 1 to 5
substituent(s) selected from the following group D,
(3) C_{3-8} cycloalkyl optionally substituted by 1 to 5
substituent(s) selected from the following group D,
(4) C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5
substituent(s) selected from the following group D,
(5) heterocyclic group optionally substituted by 1 to 5
substituent(s) selected from the following group D
wherein the heterocyclic group has 1 to 4 heteroatom(s)
selected from an oxygen atom, a nitrogen atom and a sulfur atom, or
(6) heterocycle C_{1-6} alkyl optionally substituted by 1 to 5
substituent(s) selected from the following group D
wherein the heterocycle C_{1-6} alkyl is C_{1-6} alkyl
substituted by heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally
substituted by 1 to 5 substituent(s) selected from the group D, as defined above,
group D is selected from the group consisting of:
(a) hydrogen atom,
(b) halogen atom,
(c) cyano,
(d) nitro,
(e) optionally substituted C_{1-6} alkyl (as defined above),
(f) $-(CH_2)_t-COR^{a18}$,
(hereinafter each t means independently 0 or an integer of 1 to 6),
wherein R^{a18} is
(1') optionally substituted C_{1-6} alkyl (as defined above),
(2') C_{6-14} aryl optionally substituted by 1 to
5 substituent(s) selected from the above group B or
(3') heterocyclic group optionally substituted
by 1 to 5 substituent(s) selected from the above
group B

wherein the heterocyclic group has 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom,

(g) $-(CH_2)_t-COOR^{a19}$

wherein R^{a19} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above) or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(h) $-(CH_2)_t-CONR^{a27}R^{a28}$

wherein R^{a27} and R^{a28} are each independently,

(1") hydrogen atom,

(2") optionally substituted C_{1-6} alkyl (as defined above),

(3") C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(4") C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(5") heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(6") heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,
wherein the heterocycle C_{1-6} alkyl is C_{1-6} alkyl substituted by heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally substituted by 1 to 5 substituent(s) selected from the above group B, as defined above,

(7") C_{3-8} cycloalkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(8") C_{3-8} cycloalkyl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(9") hydroxyl group or

(10") C_{1-6} alkoxy,

(i) $-(CH_2)_t-C(=NR^{a33})NH_2$

wherein R^{a33} is hydrogen atom, C_{1-6} alkyl, hydroxyl group or C_{1-6} alkoxy,

(j) $-(CH_2)_t-OR^{a20}$

wherein R^{a20} is

(1') hydrogen atom,

(2') optionally substituted C_{1-6} alkyl (as defined above),

(3') optionally substituted C_{2-6} alkenyl (as defined above),

(4') C_{2-6} alkynyl optionally substituted by 1 to 3 substituent(s) selected from the above group A,

(5') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(6') C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(7') heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(8') heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, wherein the heterocycle group has 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom,

(9') C_{3-8} cycloalkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, or

(10') C_{3-8} cycloalkyl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(k) $-(CH_2)_t-O-(CH_2)_p-COR^{a21}$

wherein R^{a21} is amino, C_{1-6} alkylamino or heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a

nitrogen atom and a sulfur atom and optionally substituted by 1 to 5 substituent(s) selected from the above group B, and

p is 0 or an integer of 1 to 6,

(l) $-(CH_2)_t-NR^{a22}R^{a23}$

wherein R^{a22} and R^{a23} are each independently

(1') hydrogen atom,

(2') optionally substituted C_{1-6} alkyl (as defined above),

(3') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(4') C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(5') heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, wherein the heterocycle group has 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom or

(6') heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(m) $-(CH_2)_t-NR^{a29}CO-R^{a24}$

wherein R^{a29} is hydrogen atom, C_{1-6} alkyl or C_{1-6} alkanoyl, and R^{a24} is

(1') amino,

(2') C_{1-6} alkylamino,

(3') optionally substituted C_{1-6} alkyl (as defined above),

(4') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(5') heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally substituted by 1 to 5 substituent(s) selected from the above group B, or

(6') heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, wherein the heterocycle has 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom,

(n) $-(CH_2)_t-NR^{a29}SO_2-R^{a25}$

wherein R^{a29} is as defined above, and R^{a25} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B or heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(o) $-(CH_2)_t-S(O)_q-R^{a25}$

wherein R^{a25} is as defined above, and q is 0, 1, or 2,

(p) $-(CH_2)_t-SO_2-NHR^{a26}$

wherein R^{a26} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B or heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally substituted by 1 to 5 substituent(s) selected from the above group B,

and

(q) heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom,

w is an integer of 1 to 3, and

Y is

(1) a single bond,

(2) C_{1-6} alkylene,

(3) C_{2-6} alkenylene,

(4) -CO-,

(5) $-CO_2-(CH_2)_n-$,

hereinafter n is 0 or an integer of 1 to 6,

(6) -CONH-$(CH_2)_n$-NH-,

(7) -$NHCO_2$-,

(8) -NHCONH-,

(9) -O-$(CH_2)_n$-O-,

(10) -SO_2-,

(11) -$(CH_2)_m$-NR^{a12}-$(CH_2)_n$-,

hereinafter m is 0 or an integer of 1 to 6,

wherein R^{a12} is

(1') hydrogen atom,

(2') optionally substituted C_{1-6} alkyl (as defined above),

(3') C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(4') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(5') -COR^{b5}

wherein R^{b5} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(6') -$COOR^{b5}$ (R^{b5} is as defined above) or

(7') -SO_2R^{b5} (R^{b5} is as defined above),

(12) -$NR^{a12}CO$- (R^{a12} is as defined above),

(13) -$CONR^{a13}$-$(CH_2)_n$-

wherein R^{a13} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above) or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(14) -CONH-CHR^{a14}-

wherein R^{a14} is C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(15) $-O-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$

wherein R^{a15} and R^{a16} are each independently

(1') hydrogen atom,

(2') carboxyl,

(3') C_{1-6} alkyl,

(4') $-OR^{b6}$

wherein R^{b6} is C_{1-6} alkyl or C_{6-14} aryl C_{1-6} alkyl,

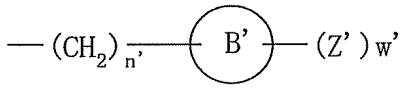
or

(5') $-NHR^{b7}$

wherein R^{b7} is hydrogen atom, C_{1-6} alkyl, C_{1-6} alkanoyl or C_{6-14} aryl C_{1-6} alkyloxycarbonyl, or

R^{a15} is optionally

(6')



wherein n', ring B', Z' and w' are defined the same as the above-mentioned n, ring B, Z and w, respectively, and may be the same as or different from the respective counterparts,

(16) $-(CH_2)_n-NR^{a12}-CHR^{a15}-$ (R^{a12} and R^{a15} are each as defined above),

(17) $-NR^{a17}SO_2-$

wherein R^{a17} is hydrogen atom or C_{1-6} alkyl,

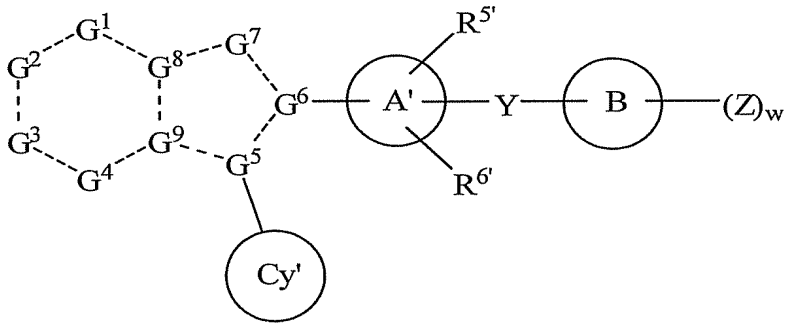
(18) $-S(O)_e-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$ (e is 0, 1 or 2, R^{a15} and R^{a16} are each as defined above),

or

(19) $-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$ (R^{a15} and R^{a16} are each as defined above),

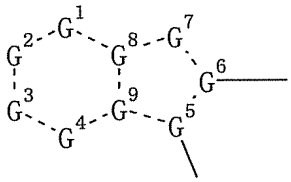
or a pharmaceutically acceptable salt thereof.

112. (New) A fused ring compound of the following formula

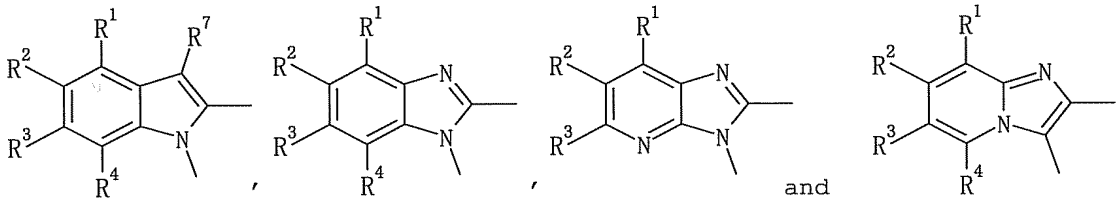


wherein

the moiety



is a fused ring selected from



wherein R^1, R^2, R^3 and R^4 are each independently,

(1) hydrogen atom,

(2) C_{1-6} alkanoyl,

(3) carboxyl,

(4) cyano,

(5) nitro,

(6) C_{1-6} alkyl optionally substituted by 1 to 3

substituent(s) selected from the following group A,

group A is selected from the group consisting of halogen atom, hydroxyl group, carboxyl, amino, C_{1-6} alkoxy, C_{1-6} alkoxy C_{1-6} alkoxy, C_{1-6} alkoxycarbonyl, and C_{1-6} alkylamino,

(7) $-COOR^{a1}$

wherein R^{a1} is optionally substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl C_{1-6} alkyl optionally

substituted by 1 to 5 substituent(s) selected from the
following group B or glucuronic acid residue,
group B is selected from the group consisting of halogen atom, cyano, nitro,
C_{1-6} alkyl, halogenated C_{1-6} alkyl, C_{1-6} alkanoyl,
$-(CH_2)_r-COOR^{b1}$, $-(CH_2)_r-CONR^{b1}R^{b2}$, $-(CH_2)_r-NR^{b1}R^{b2}$,
$-(CH_2)_r-NR^{b1}-COR^{b2}$, $-(CH_2)_r-NHSO_2R^{b1}$, $-(CH_2)_r-OR^{b1}$,
$-(CH_2)_r-SR^{b1}$, $-(CH_2)_r-SO_2R^{b1}$ and $-(CH_2)_r-SO_2NR^{b1}R^{b2}$
wherein R^{b1} and R^{b2} are each independently
hydrogen atom or C_{1-6} alkyl and r is 0 or an integer of 1 to 6,

(8) $-CONR^{a2}R^{a3}$

wherein R^{a2} and R^{a3} are each independently hydrogen atom,
C_{1-6} alkoxy or optionally substituted C_{1-6} alkyl (as defined above),

(9) $-C(=NR^{a4})NH_2$

wherein R^{a4} is hydrogen atom or hydroxyl group,

(10) $-NHR^{a5}$

wherein R^{a5} is hydrogen atom, C_{1-6} alkanoyl or C_{1-6} alkylsulfonyl,

(11) $-OR^{a6}$

wherein R^{a6} is hydrogen atom or optionally substituted
C_{1-6} alkyl (as defined above),

(12) $-SO_2R^{a7}$

wherein R^{a7} is hydroxyl group, amino, C_{1-6} alkyl or C_{1-6} alkylamino,

(13) $-P(=O)(OR^{a31})_2$

wherein R^{a31} is hydrogen atom, optionally substituted C_{1-6}
alkyl (as defined above) or C_{6-14} aryl C_{1-6} alkyl
optionally substituted by 1 to 5 substituent(s)
selected from the above group B,

or

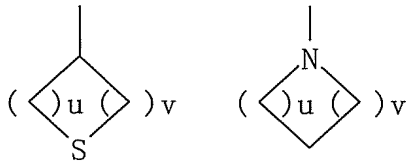
(14) heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom, and

R^7 is hydrogen atom or optionally substitute C_{1-6} alkyl (as defined above),

ring Cy' is

(1) C_{3-8} cycloalkyl optionally substituted by 1 to 5
substituent(s) selected from the following group C,
group C is selected from the group consisting of hydroxyl group, halogen atom,
C_{1-6} alkyl and C_{1-6} alkoxy, or

(2)



wherein u and v are each independently an integer of 1 to 3,

ring A' is a group selected from a group consisting of
phenyl, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl,
cyclohexyl, cyclohexenyl, furyl, and thienyl,

$R^{5'}$ and $R^{6'}$ are each independently
(1) hydrogen atom,
(2) halogen atom,
(3) optionally substituted C_{1-6} alkyl (as defined above) or
(4) hydroxyl group

ring B is C_{3-8} cycloalkyl,

each Z is independently
(1) a group selected from the following group D,
(2) C_{6-14} aryl optionally substituted by 1 to 5
substituent(s) selected from the following group D,
(3) C_{3-8} cycloalkyl optionally substituted by 1 to 5
substituent(s) selected from the following group D,
(4) C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5
substituent(s) selected from the following group D,
(5) heterocyclic group optionally substituted by 1 to 5
substituent(s) selected from the following group D
wherein the heterocyclic group has 1 to 4 heteroatom(s)
selected from an oxygen atom, a nitrogen atom and a sulfur atom, or
(6) heterocycle C_{1-6} alkyl optionally substituted by 1 to 5

substituent(s) selected from the following group D
wherein the heterocycle C_{1-6} alkyl is C_{1-6} alkyl
substituted by heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally
substituted by 1 to 5 substituent(s) selected from the group D, as defined above,
group D is selected from the group consisting of:

(a) hydrogen atom,

(b) halogen atom,

(c) cyano,

(d) nitro,

(e) optionally substituted C_{1-6} alkyl (as defined above),

(f) $-(CH_2)_t-COR^{a18}$,

(hereinafter each t means independently 0 or an integer of 1 to 6),

wherein R^{a18} is

(1') optionally substituted C_{1-6} alkyl (as defined above),

(2') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B or

(3') heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the above group B
wherein the heterocyclic group has 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom,

(g) $-(CH_2)_t-COOR^{a19}$

wherein R^{a19} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above) or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(h) $-(CH_2)_t-CONR^{a27}R^{a28}$

wherein R^{a27} and R^{a28} are each independently,

(1") hydrogen atom,

(2") optionally substituted C_{1-6} alkyl (as defined above),

(3") C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(4") C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(5") heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(6") heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, wherein the heterocycle C_{1-6} alkyl is C_{1-6} alkyl substituted by heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally substituted by 1 to 5 substituent(s) selected from the above group B, as defined above,

(7") C_{3-8} cycloalkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(8") C_{3-8} cycloalkyl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(9") hydroxyl group or

(10") C_{1-6} alkoxy,

(i) $-(CH_2)_t-C(=NR^{a33})NH_2$

wherein R^{a33} is hydrogen atom, C_{1-6} alkyl, hydroxyl group or C_{1-6} alkoxy,

(j) $-(CH_2)_t-OR^{a20}$

wherein R^{a20} is

(1') hydrogen atom,

(2') optionally substituted C_{1-6} alkyl (as defined above),

(3') optionally substituted C_{2-6} alkenyl (as defined above),

(4') C_{2-6} alkynyl optionally substituted by 1 to 3 substituent(s) selected from the above group A,

(5') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(6') C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(7') heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(8') heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, wherein the heterocycle group has 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom,

(9') C_{3-8} cycloalkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, or

(10') C_{3-8} cycloalkyl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(k) $-(CH_2)_t-O-(CH_2)_p-COR^{a21}$

wherein R^{a21} is amino, C_{1-6} alkylamino or heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally substituted by 1 to 5 substituent(s) selected from the above group B, and

p is 0 or an integer of 1 to 6,

(l) $-(CH_2)_t-NR^{a22}R^{a23}$

wherein R^{a22} and R^{a23} are each independently

(1') hydrogen atom,

(2') optionally substituted C_{1-6} alkyl (as defined above),

(3') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(4') C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(5') heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, wherein the heterocycle group has 1 to 4 heteroatom(s)

selected from an oxygen atom, a nitrogen atom and a sulfur atom or (6') heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(m) $-(CH_2)_t-NR^{a29}CO-R^{a24}$

wherein R^{a29} is hydrogen atom, C_{1-6} alkyl or C_{1-6} alkanoyl, and

R^{a24} is

(1') amino,

(2') C_{1-6} alkylamino,

(3') optionally substituted C_{1-6} alkyl (as defined above),

(4') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(5') heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally substituted by 1 to 5 substituent(s) selected from the above group B, or

(6') heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, wherein the heterocycle has 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom,

(n) $-(CH_2)_t-NR^{a29}SO_2-R^{a25}$

wherein R^{a29} is as defined above, and R^{a25} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B or heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(o) $-(CH_2)_t-S(O)_q-R^{a25}$

wherein R^{a25} is as defined above, and q is 0, 1 or 2,

(p) $-(CH_2)_t-SO_2-NHR^{a26}$

wherein R^{a26} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B or heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom and optionally substituted by 1 to 5 substituent(s) selected from the above group B,

and

(q) heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom,

w is an integer of 1 to 3, and

Y is

(1) a single bond,

(2) C_{1-6} alkylene,

(3) C_{2-6} alkenylene,

(4) $-(CH_2)_m-O-(CH_2)_n-$,

(hereinafter m and n are each independently 0 or an integer of 1 to 6),

(5) -CO-,

(6) $-CO_2-(CH_2)_n-$,

(7) $-CONH-(CH_2)_n-NH-$,

(8) $-NHCO_2-$,

(9) -NHCONH-,

(10) $-O-(CH_2)_n-CO-$,

(11) $-O-(CH_2)_n-O-$,

(12) $-SO_2-$,

(13) $-(CH_2)_m-NR^{a12}-(CH_2)_n-$

wherein R^{a12} is

(1') hydrogen atom,

(2') optionally substituted C_{1-6} alkyl (as defined above),

(3') C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(4') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(5') $-COR^{b5}$

wherein R^{b5} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(6') $-COOR^{b5}$ (R^{b5} is as defined above) or

(7') $-SO_2R^{b5}$ (R^{b5} is as defined above),

(14) $-NR^{a12}CO-$ (R^{a12} is as defined above),

(15) $-CONR^{a13}-(CH_2)_n-$

wherein R^{a13} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above) or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(16) $-CONH-CHR^{a14}-$

wherein R^{a14} is C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(17) $-O-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$

wherein R^{a15} and R^{a16} are each independently

(1') hydrogen atom,

(2') carboxyl,

(3') C_{1-6} alkyl,

(4') $-OR^{b6}$

wherein R^{b6} is C_{1-6} alkyl or C_{6-14} aryl C_{1-6} alkyl,

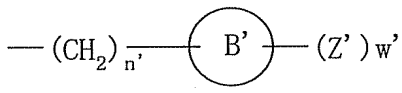
or

(5') $-NHR^{b7}$

wherein R^{b7} is hydrogen atom, C_{1-6} alkyl, C_{1-6} alkanoyl or C_{6-14} aryl C_{1-6} alkyloxycarbonyl, or

R^{a15} is optionally

(6')



wherein n', ring B', Z' and w' are defined the same as the above-mentioned n, ring B, Z and w, respectively, and may be the same as or different from the respective counterparts,

(18) $-(CH_2)_n-NR^{a12}-CHR^{a15}-$ (R^{a12} and R^{a15} are each as defined above),

(19) $-NR^{a17}SO_2-$

wherein R^{a17} is hydrogen atom or C_{1-6} alkyl,

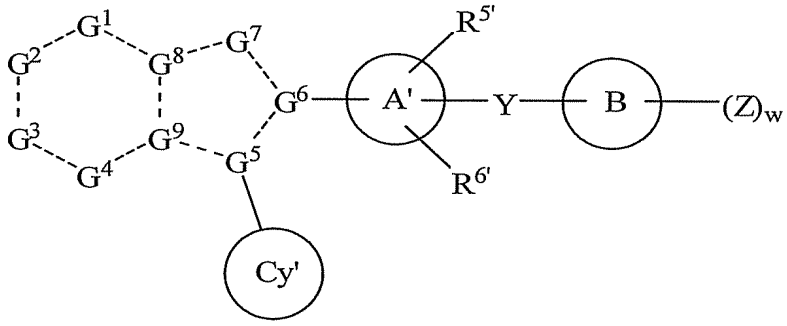
(20) $-S(O)_e-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$ (e is 0, 1 or 2, R^{a15} and R^{a16} are each as defined above),

or

(21) $-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$ (R^{a15} and R^{a16} are each as defined above),

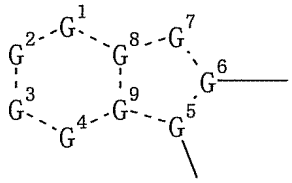
or a pharmaceutically acceptable salt thereof.

113. (New) A fused ring compound of the following formula

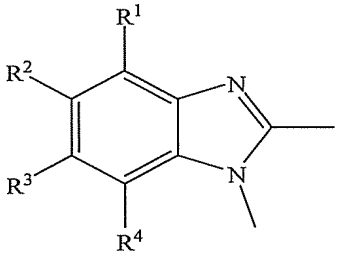


wherein

the moiety



is a fused ring of the formula



wherein R^1, R^2, R^3 and R^4 are each independently,

(1) hydrogen atom,

(2) C_{1-6} alkanoyl,

(3) carboxyl,

(4) cyano,

(5) nitro,

(6) C_{1-6} alkyl optionally substituted by 1 to 3

substituent(s) selected from the following group A,

group A is selected from the group consisting of halogen atom, hydroxyl group, carboxyl, amino, C_{1-6} alkoxycarbonyl, and C_{1-6} alkylamino,

(7) $-COOR^{a1}$

wherein R^{a1} is optionally substituted C_{1-6} alkyl (as defined above),

C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the following group B,

group B is selected from the group consisting of halogen atom,

cyano, nitro, C_{1-6} alkyl, halogenated C_{1-6} alkyl, C_{1-6} alkanoyl, $-COOR^{b1}$, $-CONR^{b1}R^{b2}$, $-NR^{b1}R^{b2}$, $-NR^{b1}-COR^{b2}$, $-NHSO_2R^{b1}$, $-OR^{b1}$, $-SR^{b1}$, $-SO_2R^{b1}$ and $-SO_2NR^{b1}R^{b2}$

wherein R^{b1} and R^{b2} are each independently hydrogen atom or C_{1-6} alkyl,

(8) $-CONR^{a2}R^{a3}$

wherein R^{a2} and R^{a3} are each independently hydrogen atom,

C_{1-6} alkoxy or optionally substituted C_{1-6} alkyl (as defined above),

(9) $-C(=NR^{a4})NH_2$

wherein R^{a4} is hydrogen atom or hydroxyl group,

(10) $-NHR^{a5}$

wherein R^{a5} is hydrogen atom, C_{1-6} alkanoyl or C_{1-6} alkylsulfonyl,

(11) $-OR^{a6}$

wherein R^{a6} is hydrogen atom or optionally substituted
C_{1-6} alkyl (as defined above),

(12) $-SO_2R^{a7}$

wherein R^{a7} is hydroxyl group, amino, C_{1-6} alkyl or C_{1-6} alkylamino,

or

(13) $-P(=O)(OR^{a31})_2$

wherein R^{a31} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above) or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

ring Cy' is C_{3-8} cycloalkyl optionally substituted by 1 to 5 substituent(s) selected from the following group C,

group C is selected from the group consisting of hydroxyl group, halogen atom, C_{1-6} alkyl, and C_{1-6} alkoxy,

ring A' is a group selected from a group consisting of phenyl, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, cyclohexyl, and cyclohexenyl,

$R^{5'}$ and $R^{6'}$ are each independently

(1) hydrogen atom,

(2) halogen atom,

(3) optionally substituted C_{1-6} alkyl (as defined above) or

(4) hydroxyl group

ring B is

(1) C_{6-14} aryl,

(2) C_{3-8} cycloalkyl or

(3) heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom,

each Z is independently

(1) a group selected from the following group D, or

(2) heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the above group B wherein the heterocyclic group has 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom

group D is selected from the group consisting of:

(a) hydrogen atom,

(b) halogen atom,

(c) cyano,

(d) nitro,

(e) optionally substituted C_{1-6} alkyl (as defined above),

(f) $-COOR^{a19}$

wherein R^{a19} is hydrogen atom or C_{1-6} alkyl

(g) $-OR^{a20}$

wherein R^{a20} is

hydrogen atom or C_{1-6} alkyl, and

(h) $-NR^{a22}R^{a23}$

wherein R^{a22} and R^{a23} are each independently

hydrogen atom or C_{1-6} alkyl,

w is an integer of 1 to 3, and

Y is

(1) a single bond,

(2) C_{1-6} alkylene,

(3) C_{2-6} alkenylene,

(4) $-(CH_2)_m-O-(CH_2)_n-$,

(hereinafter m and n are each independently 0 or an integer of 1 to 6),

(5) -CO-,

(6) $-CO_2-(CH_2)_n-$,

(7) $-CONH-(CH_2)_n-NH-$,

(8) $-NHCO_2-$,

(9) -NHCONH-,

(10) $-O-(CH_2)_n-CO-$,

(11) $-O-(CH_2)_n-O-$,

(12) $-SO_2-$,

(13) $-(CH_2)_m-NR^{a12}-(CH_2)_n-$

wherein R^{a12} is

(1') hydrogen atom,

(2') optionally substituted C_{1-6} alkyl (as defined above),

(3') C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s)

selected from the above group B,

(4') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(5') $-COR^{b5}$

wherein R^{b5} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(6') $-COOR^{b5}$ (R^{b5} is as defined above) or

(7') $-SO_2R^{b5}$ (R^{b5} is as defined above),

(14) $-NR^{a12}CO-$ (R^{a12} is as defined above),

(15) $-CONR^{a13}-(CH_2)_n-$

wherein R^{a13} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above) or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(16) $-CONH-CHR^{a14}-$

wherein R^{a14} is C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(17) $-O-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$

wherein R^{a15} and R^{a16} are each independently

(1') hydrogen atom,

(2') carboxyl,

(3') C_{1-6} alkyl,

(4') $-OR^{b6}$

wherein R^{b6} is C_{1-6} alkyl or C_{6-14} aryl C_{1-6} alkyl,

or

(5') $-NHR^{b7}$

wherein R^{b7} is hydrogen atom, C_{1-6} alkyl, C_{1-6} alkanoyl or C_{6-14} aryl C_{1-6} alkyloxycarbonyl,

or R^{a15} is optionally

(6') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(18) $-(CH_2)_n-NR^{a12}-CHR^{a15}-$ (R^{a12} and R^{a15} are each as defined above), or

(19) $-NR^{a17}SO_2-$

wherein R^{a17} is hydrogen atom or C_{1-6} alkyl,

or a pharmaceutically acceptable salt thereof.

114. (Withdrawn - New) A pharmaceutical composition comprising a fused ring compound of claim 111, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

115. (Withdrawn - New) A pharmaceutical composition comprising a fused ring compound of claim 112, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

116. (Withdrawn - New) A pharmaceutical composition comprising a fused ring compound of claim 113, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

117. (Withdrawn – New) A method for treating hepatitis C, which comprises administering an effective amount of a fused ring compound of claim 111 or a pharmaceutically acceptable salt thereof.

118. (Withdrawn – New) The method of claim 117, further comprising administering an effective amount of at least one agent selected from the group consisting of an antiviral agent other than the compound of claim 111, an antiinflammatory agent, and an immunostimulant.

119. (Withdrawn – New) The method of claim 117, further comprising administering an effective amount of interferon.

120. (Withdrawn – New) A method for inhibiting RNA-dependent RNA polymerase of hepatitis C virus, which comprises administering an effective amount of a fused ring compound of claim 111 or a pharmaceutically acceptable salt thereof.

121. (Withdrawn – New) The method of claim 120, further comprising administering an effective amount of at least one agent selected from the group consisting of an antiviral agent other than the compound of claim 111, an antiinflammatory agent, and an immunostimulant.

122. (Withdrawn – New) The method of claim 120, further comprising administering an effective amount of interferon.

123. (Withdrawn – New) A method for treating hepatitis C, which comprises administering an effective amount of a fused ring compound of claim 112 or a pharmaceutically acceptable salt thereof.

124. (Withdrawn – New) The method of claim 123, further comprising administering an effective amount of at least one agent selected from the group consisting of an antiviral agent other than the compound of claim 112, an antiinflammatory agent, and an immunostimulant.

125. (Withdrawn – New) The method of claim 123, further comprising administering an effective amount of interferon.

126. (Withdrawn – New) A method for inhibiting RNA-dependent RNA polymerase of hepatitis C virus, which comprises administering an effective amount of a fused ring compound of claim 112 or a pharmaceutically acceptable salt thereof.

127. (Withdrawn – New) The method of claim 126, further comprising administering an effective amount of at least one agent selected from the group consisting of an antiviral agent other than the compound of claim 112, an antiinflammatory agent, and an immunostimulant.

128. (Withdrawn – New) The method of claim 126, further comprising administering an effective amount of interferon.

129. (Withdrawn – New) A method for treating hepatitis C, which comprises administering an effective amount of a fused ring compound of claim 113 or a pharmaceutically acceptable salt thereof.

130. (Withdrawn – New) The method of claim 129, further comprising administering an effective amount of at least one agent selected from the group consisting of an antiviral agent other than the compound of claim 113, an antiinflammatory agent, and an immunostimulant.

131. (Withdrawn – New) The method of claim 129, further comprising administering an effective amount of interferon.

132. (Withdrawn – New) A method for inhibiting RNA-dependent RNA polymerase of hepatitis C virus, which comprises administering an effective amount of a fused ring compound of claim 113 or a pharmaceutically acceptable salt thereof.

133. (Withdrawn – New) The method of claim 132, further comprising administering an effective amount of at least one agent selected from the group consisting of an antiviral agent other than the compound of claim 113, an antiinflammatory agent, and an immunostimulant.

134. (Withdrawn – New) The method of claim 132, further comprising administering an effective amount of interferon.